



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

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## *Memorandum*

TO: Operations Committee

DATE: March 7, 2008

FR: Executive Director

W.I. 1224

RE: Contract Amendment - 511 Traffic: Telvent Farradyne

Staff recommends that this Committee approve an amendment to the 511 Traffic Contract with Telvent Farradyne in an amount not to exceed \$420,000. The addition of these funds is to 1) increase the capacity of 511 phone and web systems to support increased usage during emergencies and significant regional events, and 2) reimburse the 511 budget for work provided to Caltrans during the 2006 Devil's Slide closure and the 2007 MacArthur Maze incident.

### **Background**

A key recommendation from the 511 Strategic Plan (adopted in 2005) was to consider options for strengthening 511 phone and web services during emergencies. Use of 511 during the MacArthur Maze incident underscored the need to ensure availability of 511 services during emergencies. The number of calls on the day of the incident (Monday, April 29) was nearly 32,000, as compared to 8,600 on a typical Monday. Because the 511 phone and web systems provided valuable information during this and other regional crises, users are increasingly turning to 511/511.org when there are major incidents affecting the transportation system.

Attachment 1 shows the magnitude of usage spikes of 511 on days when there were emergencies/regional events. This increased demand for information is typically not spread across an entire day, but rather compressed into a few hours, resulting in a peak demand of a limited period within the day. It is extremely difficult to predict the magnitude of such peaks and to size systems appropriately. For example, even though our current capacity is more than adequate to meet an average day's peak use, users have experienced, during high usage days, busy signals when calling 511 or been subjected to delayed/no traffic map renderings on 511.org.

### **Recommendations to Increase 511 Phone and Web Capacity**

There are two options for increasing the maximum number of callers and web users 511 can serve in emergencies: 1) Streamline functionality to give users relevant information more quickly, and 2) Increase capacity to accommodate more users. We are pursuing both.

Streamlining Functionality. Over the past year, we have developed tools to move users to important information more quickly:

- **511 Phone:** A new 511 phone emergency tool allows 511 operators to switch to an emergency option, which abbreviates the menu so that pertinent emergency information is

accessible up front. The net outcome of focused upfront emergency information is the reduction of average call length, which frees up incoming lines for additional users.

- **511 Web:** During times of high web usage we replace the more resource-intensive interactive traffic map with a grid-based map tool. The grid map allows users to use pre-selected maps of sub-regions, rather than the normal map tool. It still provides traffic speed information and text-based tools for incident and driving time information. The net outcome of the grid map tool is a significant increase in capacity because it requires less back-end processing.

Increasing System Capacity. While reorganization/streamlining information is helpful, additional capacity is also required to allow accommodation of usage spikes that occur occasionally. Staff recommends investing \$275,000 in new system licenses and equipment that will increase capacity of the phone by 30% and the web by 50%. The increased phone capacity will support approximately 57,000 more calls per day (compared to current of 177,000 calls/day), which is 2,400 more calls per hour.

The new licenses will provide capacity above the peaks that the 511 system has previously experienced and allow for future growth. Nevertheless, there is a possibility that some users will experience busy signals or be temporarily unable to access the traffic map during extreme peak usage times. Furthermore, there are inherent external limitations to the phone and Internet networks that could limit access to 511 in emergencies. The 511 Traffic contractor and staff will continue to monitor usage trends and recommend further increases in capacity if needed.

Funding to increase 511 phone and web capacity will be provided from project savings: from current contracts (\$51,000) and from savings previously identified in the 511 Strategic Plan. (\$224,000). The Strategic Plan recommended a budget scenario that reduced the funding need for the 511 Program by 9 percent (nearly \$7 million over twenty years) when compared to the commitment in *Transportation 2030* to deliver the current scope of work. At the same time, the Plan recommended further clarification of 511's role in emergencies and a strategy to address system availability and performance during an emergency. Funding to support an enhanced emergency response was not included. Staff recommends applying this previous program savings to this emergency response purpose.

### **Reimbursement for Previous Emergencies**

The 511 program supported Caltrans' work during two regional incidents for a total cost of \$144,000 (traffic data collection readers for Devil's Slide detour) and emergency response to the MacArthur Maze incident. Funds for these efforts have been received from Caltrans and can now be amended into the Telvent contract.

### **Recommendation**

Staff recommends that the Operations Committee authorize the Executive Director or his designee to execute a contract amendment with Telvent Farradyne in an amount not to exceed \$420,000 to 1) increase capacity of 511 to support usage during emergencies, and 2) reimburse the 511 budget for work provided during the Devil's Slide and the MacArthur Maze incidents.

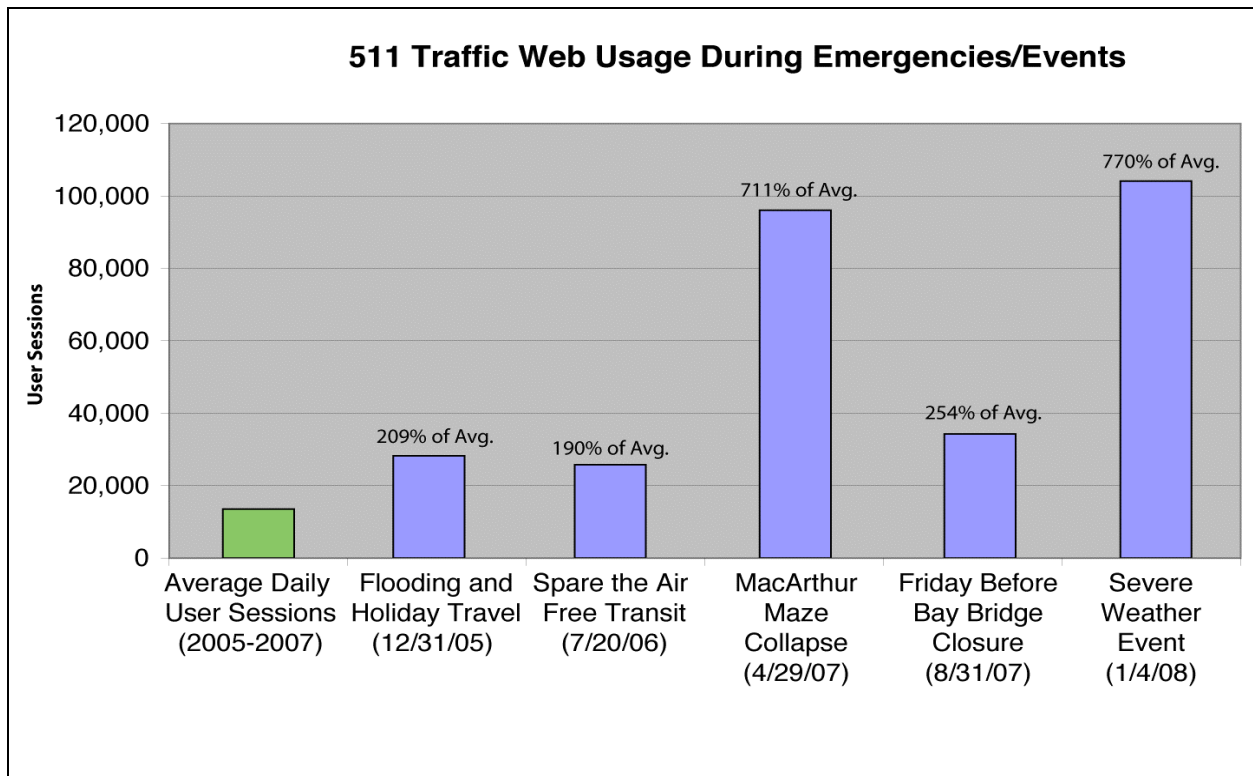
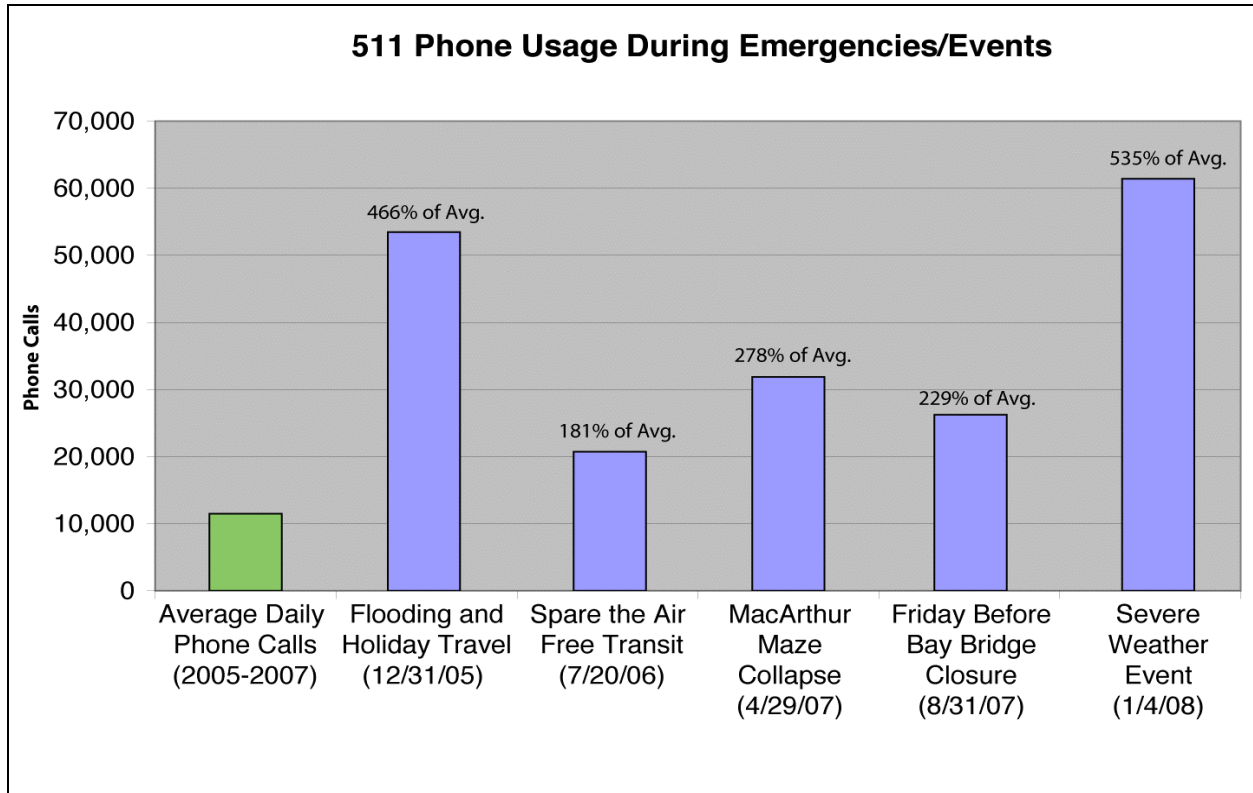
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Steve Heminger

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**Attachment 1**  
**Usage of 511 Services in Emergencies/Regional Events**



## REQUEST FOR COMMITTEE APPROVAL

### Summary of Proposed Contract Amendment

Work Item No.:	1224
Consultant:	Telvent Farradyne Rockville, MD
Work Project Title:	511 Traffic
Purpose of Project:	Increase phone and web capacity to ensure continuous delivery of 511 services in emergencies. Reimburse the 511 Traffic contract for work at Devil's Slide and during the MacArthur Maze incident.
Brief Scope of Work:	Purchase and install additional computer equipment and associated licenses to provide increased 511 phone and web usage capacity.
Project Cost Not to Exceed	\$420,000; (Previous Contract = \$9,923,458
Funding Sources:	STP, SAFE
Fiscal Impact:	Funds are available in the agency budget.
Motion by Committee:	That the Executive Director or his designee is authorized to negotiate and enter into a Contract Amendment with Swirl, Inc. and the Chief Financial Officer is directed to set aside funds up to \$420,000 for such Contract Amendment.

Operations Committee:

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Sue Lempert, Chair

Approved:

Date: March 14, 2008